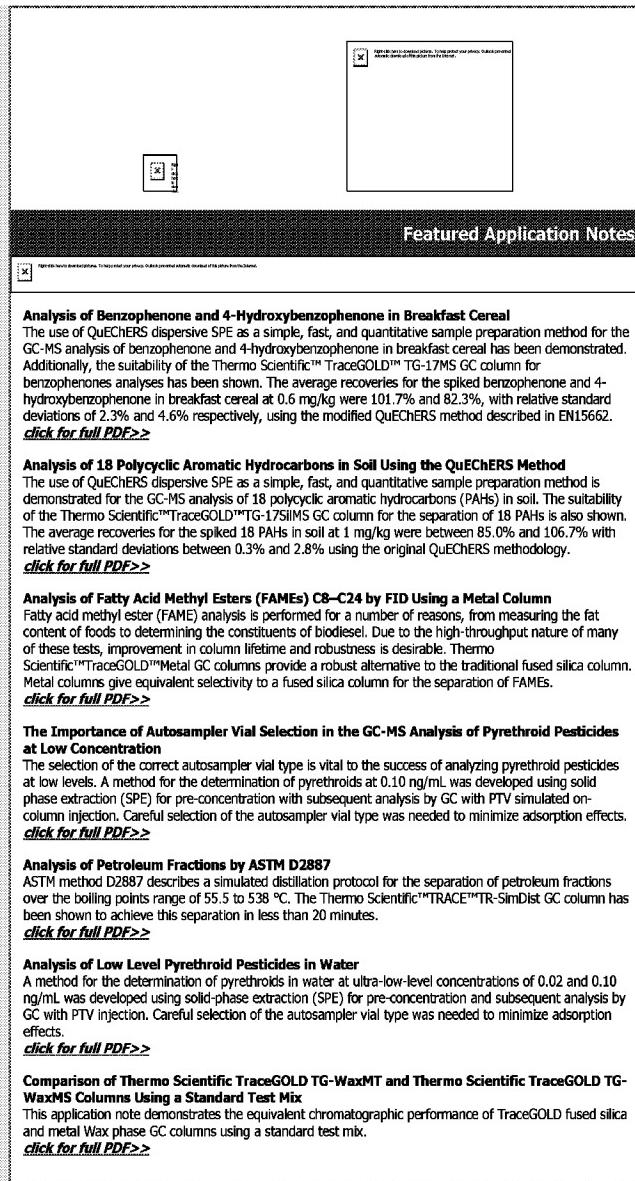


From: Separation Science <elearning.solutions@sepscience.com>
Sent: Tuesday, February 26, 2013 1:20 PM
To: Hanchett, James (DPH)
Subject: Thermo Featured GC Application Notes



Featured Application Notes

[Analysis of Benzophenone and 4-Hydroxybenzophenone in Breakfast Cereal](#)
The use of QuEChERS dispersive SPE as a simple, fast, and quantitative sample preparation method for the GC-MS analysis of benzophenone and 4-hydroxybenzophenone in breakfast cereal has been demonstrated. Additionally, the suitability of the Thermo Scientific™ TraceGOLD™ TG-17MS GC column for benzophenones analyses has been shown. The average recoveries for the spiked benzophenone and 4-hydroxybenzophenone in breakfast cereal at 0.6 mg/kg were 101.7% and 82.3%, with relative standard deviations of 2.3% and 4.6% respectively, using the modified QuEChERS method described in EN15662.
[click for full PDF>>](#)

[Analysis of 18 Polycyclic Aromatic Hydrocarbons in Soil Using the QuEChERS Method](#)
The use of QuEChERS dispersive SPE as a simple, fast, and quantitative sample preparation method is demonstrated for the GC-MS analysis of 18 polycyclic aromatic hydrocarbons (PAHs) in soil. The suitability of the Thermo Scientific™ TraceGOLD™ TG-17SiMS GC column for the separation of 18 PAHs is also shown. The average recoveries for the spiked 18 PAHs in soil at 1 mg/kg were between 85.0% and 106.7% with relative standard deviations between 0.3% and 2.8% using the original QuEChERS methodology.
[click for full PDF>>](#)

[Analysis of Fatty Acid Methyl Esters \(FAMEs\) C8–C24 by FID Using a Metal Column](#)
Fatty acid methyl ester (FAME) analysis is performed for a number of reasons, from measuring the fat content of foods to determining the constituents of biodiesel. Due to the high-throughput nature of many of these tests, improvement in column lifetime and robustness is desirable. Thermo Scientific™ TraceGOLD™ Metal GC columns provide a robust alternative to the traditional fused silica column. Metal columns give equivalent selectivity to a fused silica column for the separation of FAMEs.
[click for full PDF>>](#)

[The Importance of Autosampler Vial Selection in the GC-MS Analysis of Pyrethroid Pesticides at Low Concentration](#)
The selection of the correct autosampler vial type is vital to the success of analyzing pyrethroid pesticides at low levels. A method for the determination of pyrethroids at 0.10 ng/mL was developed using solid phase extraction (SPE) for pre-concentration with subsequent analysis by GC with PTV simulated on-column injection. Careful selection of the autosampler vial type was needed to minimize adsorption effects.
[click for full PDF>>](#)

[Analysis of Petroleum Fractions by ASTM D2887](#)
ASTM method D2887 describes a simulated distillation protocol for the separation of petroleum fractions over the boiling points range of 55.5 to 538 °C. The Thermo Scientific™ TRACE™ TR-SimDist GC column has been shown to achieve this separation in less than 20 minutes.
[click for full PDF>>](#)

[Analysis of Low Level Pyrethroid Pesticides in Water](#)
A method for the determination of pyrethroids in water at ultra-low-level concentrations of 0.02 and 0.10 ng/mL was developed using solid-phase extraction (SPE) for pre-concentration and subsequent analysis by GC with PTV injection. Careful selection of the autosampler vial type was needed to minimize adsorption effects.
[click for full PDF>>](#)

[Comparison of Thermo Scientific TraceGOLD TG-WaxMT and Thermo Scientific TraceGOLD TG-WaxMS Columns Using a Standard Test Mix](#)
This application note demonstrates the equivalent chromatographic performance of TraceGOLD fused silica and metal Wax phase GC columns using a standard test mix.
[click for full PDF>>](#)

Published by Eclipse Business Media Ltd
Frederick House | Princes Court | Beam Heath Way | Nantwich | Cheshire CW5 6PQ | United Kingdom
20 Maxwell Road | #09-17 Maxwell House | Singapore 069113

Copyright © 2013 Eclipse Business Media Ltd. All rights reserved.

This message was sent from Separation Science to james.hanchett@state.ma.us. It was sent from: Eclipse Business Media Ltd, Frederick House, Princes Court, Beam Heath Way, Nantwich, Cheshire CW5 6PQ, United Kingdom. You can modify/update your subscription via the link below.

[Unsubscribe](#)